

DN GSIE 8803US
Amendment Dated December 6, 2004
Reply to Office Action of September 8, 2004

DESCRIPTION OF THE PREFERRED EMBODIMENT

Please replace paragraph 17 with the following paragraph.

[0017] In operation, the control device moves the pintle 21 to a raised position allowing the exhaust gas stream to flow through the intake pipe 9. As the exhaust gas stream flows through the intake pipe 9, it heats the afterburner 1 to a temperature high enough to burn the large particles 23 entrained in the exhaust gas stream. A typical exhaust gas stream can have a temperature range anywhere from ambient to 1300°F and carbon particles in the exhaust gas stream will burn at a temperature of about 900°F. However, other particles may have other burn temperatures. The afterburner 1 captures large particles contained in an exhaust gas stream and burns the captured particles using conductive heat. When the exhaust gas stream is at a temperature of at least 900°F and the EGR valve 3 is open, the exhaust gas stream continuously heats the afterburner 1 so that the afterburner 1 continuously burns the large carbon particles 23 it captures.